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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/896,858   | 06/29/2001  | Boris Gelfand        | 2127                | 9028             |
| 7590   | 04/25/2006  |                      | EXAMINER            |                  |
| Beck & Tysver, P.L.L.C.<br>Suite 100<br>2900 Thomas Avenue South<br>Minneapolis, MN 55416-4477 |             |                      | NGUYEN, CINDY       |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2161                |                  |

DATE MAILED: 04/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |
|------------------------------|------------------------|---------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|                              | 09/896,858             | GELFAND, BORIS      |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |
|                              | Cindy Nguyen           | 2171                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 01/30/06.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-6 and 15-20 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-6, 15-20 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 29 June 2001 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.

4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_.

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/30/06 has been entered.

***Response to Arguments***

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

**1. *Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**2. *Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Tamano et al. (US 5930799) (Tamano).***

Regarding claim 1, Tamano discloses: a collection of data stored on a computer system relating to multiple instances of multiple entity types (col. 3, lines 9-56, Tamano), the data collection comprising:

- a) a plurality of data cells (fig. 3) stored on the computer system containing all of the data in the collection, with each cell being a data construct containing (fig. 3 and corresponding text, Tamano);
  - i) a single instance identifier value identifying one specific instance of a specific entity type (24, fig. 3, such as a number (1) unique ID for each trial subject , Tamano);
  - ii) a single attribute type identifier value (CRF1-0.BMP) identifying one specific attribute type for the specific entity type( 23 such as name of image file ,fig. 3, Tamano); and
  - iii) an attribute value for the identified one specific attribute type (page number 22, fig. 3, Tamano), such that each cell contains the attribute value for only the one specific attribute type and for only the one specific instance of the specific entity type and does not contain the attribute value for any other attribute type or any other instance of the specific entity type, wherein each cell is self-identifying (col. 6, line 56 to col. 7, line 50, Tamano).

Regarding claim 2, all the limitations of this claim have been noted in the rejection of claim 1. In addition, Tamano discloses: wherein each data cell further contains a single entity identifier value identifying the specific entity type (21, fig. 3, Tamano).

Regarding claim 3, all the limitations of this claim have been noted in the rejection of claim 2. In addition, Tamano discloses: wherein all cells having the same instance identifier value (all cells 21-24 have the same unique ID 24) and the same entity identifier value together

(21) define a cell set containing all of the data in the collection relating to the one specific instance of the one specific entity type (col. 6, lines 56-67, Tamano).

Regarding claim 4, all the limitations of this claim have been noted in the rejection of claim 2. In addition, Tamano discloses: wherein at least one cell has an attribute value that contains multiple, separate values relating to the specific attribute type of the specific instance of the specific entity type (such as page number relating to specific file name and cell ID 24, fig. 3, Tamano).

Regarding claim 5, all the limitations of this claim have been noted in the rejection of claim 2. In addition, Tamano discloses: wherein each cell has only four fields relating to actual data, the four fields containing the instance identifier value, the entity identifier value, the attribute type identifier, and the attribute value (see 21, 22, 23 and 24 fig. 3 and corresponding text, Tamano).

Regarding claim 6, all the limitations of this claim have been noted in the rejection of claim 5. In addition, Tamano discloses: wherein no two cells contain the same values in all of the four fields (see 21, 22, 23 and 24 fig. 3 and corresponding text, Tamano).

### **3. *Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**4. Claims 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamano et al. (US 5930799) (Tamano) in view of Narayanan (US 5598519).**

Regarding claim 15, all the limitations of this claim have been noted in the rejection of claim 1. However, Tamano didn't disclose: a linking cell stored on the computer system defining an association between the first cell and the second cell, the linking cell having four fields each having values, the value of two of the fields of the linking cell being the same as the values of the first cell ; the value of the remaining two fields of the linking cell being the same as the values of the first and second fields of the second cell. On the other hand, Narayanan discloses: a linking cell stored on the computer system defining an association between the first cell and the second cell, the linking cell having four fields each having values, the value of two of the fields of the linking cell being the same as the values of the first cell ; the value of the remaining two fields of the linking cell being the same as the values of the first and second fields of the second cell (col. 3, line 3, to col. 4, lines 38, Narayanan). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include a linking cell stored on the computer system defining an association between the first cell and the second cell, the linking cell having four fields each having values, the value of two of the fields of the linking cell being the same as the values of the first cell ; the value of the remaining two fields of the linking cell being the same as the values of the first and second fields of the second cell in the system of Tamano as taught by Narayanan. The motivation being to product savings in both memory usage and time.

Regarding claim 16, all the limitations of this claim have been noted in the rejection of claim 1. In addition, Tamano/Narayanan discloses: wherein the linking cell has the same format as the first and second cells (col. 3, lines 35-48, Narayanan).

Regarding claim 17, all the limitations of this claim have been noted in the rejection of claim 1. In addition, Tamano/Narayanan discloses: wherein the linking cell utilizes a flag to indicate that the linking cell contains linking information (col. 7, lines 1-23, Tamano).

Regarding claim 18, all the limitations of this claim have been noted in the rejection of claim 1. In addition, Tamano/Narayanan discloses: wherein the first, second, and linking cells each contain the following four fields: an entity instance filed, an entity type filed, and attribute type field and an attribute value field (col. 3, line 3, to col. 4, lines 38, Narayanan).

Regarding claim 19, all the limitations of this claim have been noted in the rejection of claim 1. In addition, Tamano/Narayanan discloses: wherein the linking cell contains the entity instance filed value and the entity type filed value of the first cell as the values of its own entity instance field and its entity type field , respectively; and further wherein the linking cell contains the entity instance filed value and the entity type field value of the second cell (col. 3, line 3, to col. 4, lines 38, Narayanan).

Regarding claim 20, all the limitations of this claim have been noted in the rejection of claim 19. In addition, Tamano/Narayanan discloses: further comprising a second linking cell also having an entity instance field, an entity type filed, and attribute type field, and an attribute value field, wherein the second linking cell contains the entity

instance field value and entity type field value of the second cell as the values of its own entity instance field and its entity type field, respectively; and further wherein the second linking cell contains the entity instance field value and the entity type field value of the first cell as the values of its own attribute value field and its attribute type field, respectively (col. 12, lines 60 to col. 13, lines 7, Narayanan).

### **Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lowry et al. (U.S 4864497). Method of integrating software application programs using an attributive data model database.

Handel et al. (U.S 6195651). System, method and article of manufacture for a tuned user application experience.

Gupta et al. (U.S 6154748). Method for visually mapping data between different record formats.

Carey et al. (U.S 6421658). Efficient implementation of typed view hierarchies for ORDBMS.

Gupta et al. (U.S 6438562). Parallel index maintenance.

Heubner et al. (U.S 6101502). Object model mapping and runtime engine for employing relational database with object oriented software.

**5. Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cindy Nguyen whose telephone number is 571-272-4025. The examiner can normally be reached on M-F: 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

*CN*  
Cindy Nguyen  
April 20, 2006

*Frantz Coby*  
FRANTZ COBY  
PRIMARY EXAMINER